

**USEPA/OECA/OC State and Tribal Assistance Grants (STAG) 2000-2001**  
**Colorado: Comprehensive Measurement Tool (COMET)**  
**Quarter 2, FY2004**  
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**Reporting of Milestones and Outcomes/Results for EPA's  
Enforcement and Compliance Assurance Grants**

Reporting Period: Year:       **2004**

- ☐ Oct-Dec (due last working day Jan)
- ☒ Jan-Mar (due last working day Apr)
- ☐ Apr-Jun (due last working day Jul)
- ☐ Jul-Sep (due last working day Oct)

**I. Information**

State/Tribe/University or Department:

Colorado Department of Public Health and Environment

Title of Project:

Comprehensive Measurement Tool (COMET)

Grant Contact Person: (*name, title, address, phone, fax, & email*)

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Funds Received by Grantee (Date and amount):

Aug. 16, 2002, \$75,000

EPA Regional Project Officer:

Arthur Horowitz, OECA/OPPAC

EPA Regional Technical Contact:

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Author of report:

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**II. Status of Project Milestones**

<b>Project Milestones and/or comments</b>	<b>Anticipated Completion Date</b>	<b>Completion Date</b>
1) Project Kickoff – delay due to receipt of grant award in mid-Aug. 2002.	July 1, 2002	Oct. 15, 2002*
2) Purchase Order Contract signed by project	July 14, 2002	Oct. 22, 2002*

contractor, EME Solutions and CDPHE.		
3) COMET research and literature review.	Dec. 20, 2002	Dec. 19, 2002
4) Develop draft template with compliance and P2 indicators.	Jan. 21, 2003	Jan. 21, 2003
5) Develop COMET template specific to the asphalt industry.	Mar. 1, 2003	April 1, 2003
6) Develop instruction manual for template users.	Mar. 1, 2003	April 1, 2003
7) Complete and implement COMET template.	June 2003	June 2003
8) Begin Phase II – securing partners/commitments to implement COMET tools	July 2003	July 2003
9) COMET tool development and implementation	Feb. 2004	Under way
10) Determine relationship between traditional and focused inspections.	Feb. 1, 2004	Mar. 23, 2004
<i>11) Conduct follow-up compliance assessments to gauge improvement of project partners based on implementation of COMET. (New milestone added to 1<sup>st</sup> quarter 2004 report).</i>	<i>October 1, 2004*</i>	
12) Develop measurement tools to determine environmental outcomes and environmental indicators.	June 1, 2004 Revise to 9/04*	
13) Measure impact of COMET implementation on compliance and environmental outcomes	June 1, 2004 Revise to 9/04*	
14) Develop final report	June 30, 2004 Revise to 12/31/04*	

### III. Project Status.

Anticipated project completion date: June 30, 2004 – Request submitted to EPA in January 2004 to extend project to **December 31, 2004**. This extension would allow for additional time for COMET implementation and day-to-day operation using COMET during the sector's operating season (spring, summer and fall). In addition, project partners and CDPHE will have a longer period of time to assess the benefits of a COMET approach. A June 2004 deadline would not provide enough data to assess the value of the project because COMETs are being implemented at working facilities starting in March/April.

*If this anticipated date is later than the date reported on the last report, please explain.*

**IV. Results/Outcomes:** (Both planned and actual - to be updated with each report) Outcome measures include changes in awareness and understanding, changes in behavior, and environmental and human health improvements.

Planned: Performance measurements have been researched and evaluated during the initial

phase of the project and have been included in the draft COMET template. The performance measurements will be analyzed later in the project (after implementation of the COMET).

Planned measurements include an evaluation of the following:

- Traditional inspections versus focused, sector-based inspections based proceeded by an innovative compliance assistance approach (a carry over from the COMPASS project) – *completed by a contractor and submitted to CDPHE on March 23, 2004 via e-mail (copy of Final Technical Report attached)*;
- The change in environmental outcomes including factors such as regulatory compliance, pollution prevention indicators and non-traditional emission sources. The proposed measure will draw a link between the measured change in a compliance indicator and an environmental outcome – *project partners are starting to report improvements in better understanding and complying with permit terms and conditions based on the COMET legal requirement analysis and the development and implementation of procedures and work practices to ensure continued compliance. Partners are identifying more opportunities for improvement (regulatory and nonregulatory) and realizing better support internally through increased awareness and improved relationships with CDPHE and other sector partners. COMET is also leading to an unanticipated, but very beneficial, collaborative problem solving approach to existing and forthcoming regulatory problems (e.g., fugitive dust/drought).*
- The impact on compliance and environmental outcomes following implementation of the COMET project.

Milestones 1) and 2) did not meet the anticipated completion date due to delay receipt of funds.

Milestone 5) and 6) – development of the COMET template and manual missed the anticipated completion date by one month. This delay was due to health-related issues experienced by the contractor. The delay does not impact the project as extra time was built into the schedule to accommodate unexpected or unanticipated issues such as this.

Actual: 12 companies are now participating in the second phase of the COMET project, COMET development and implementation. A number of companies are seeing the value of a COMET approach and are expanding COMET development to encompass the operations of the entire facility, not just the hot mix asphalt. CDPHE is encouraging the broader application of the COMET tools into the mining/quarrying, maintenance shop and redi-mix activities of interested companies.

CDPHE provided on-site technical assistance to three companies in the fourth quarter of 2003. The companies are very enthusiastic about the benefits of a COMET approach and are working to complete the COMET tool prior to the start of the 2004 operating season. Some of the benefits project partners are experiencing include a thorough analysis of the activities and environmental

impacts of the hot mix facility, a better understanding and awareness of the terms and conditions of permits and other regulatory requirements (especially on the cross-media and multi-media basis), strong commitments from upper management, resource prioritization based on COMET objectives and targets, improved working relationship with CDPHE and improved awareness throughout the company of environmental responsibilities both the regulated and the nonregulated activities and impacts. The preliminary work of the companies, especially the smaller companies, is very rewarding and encouraging.

Milestone 7) – the project partners are in different stages of development with some COMET plans ISO certified (two companies) and some (approximately 8) relying on the COMET tools developed during phase one of the project to complete and implement company-specific COMETs. The remaining project partners were either already working on a COMET-like approach or are using a combination of COMET-like resources. At the end of the project, the feedback from companies using the COMET tools will be used to improve the state's asphalt sector COMET template and manual.

Milestone 8) – In December another company signed onto the project - bringing the total number of participating companies to 12. The number of hot mix facilities participating in the project is approximately 25. As companies develop the COMET plan and realize the benefits of the system, more facilities are being added to the implementation phase.

Milestones 9) – 12) – A contractor has been hired to analyze the success and benefits of the COMPASS/COMET approach versus conventional regulatory processes. The contractor is analyzing historical inspection reports, facility permits and COMPASS project data to help make this determination. COMET data will be evaluated throughout the remainder of the project and as COMET tools are implemented and working. To date, the contractor is on schedule with the contractual requirements of this phase.

Describe results and attach additional information if necessary.

Funding Area - with Goal	Outcome Measurement Examples
<p><b>CA Outcome Measurement</b> - developing and testing outcome measures from state/tribal enforcement and compliance assurance activity.</p>	<ul style="list-style-type: none"> <li>• Focused compliance assistance and the systems approach are helping project partners to better understand their permits, including the terms, conditions and requirements included in permits. Several partners have identified opportunities for improvement as a result of COMET.</li> <li>• In response, companies have updated or modified permits during the winter months and are developing procedures to ensure compliance, such as compliance checklists, recordkeeping/tracking documents and other systematic tools.</li> <li>• Focused compliance assistance has also provided benefit to CDPHE by helping to better understand the sector and the related environmental issues.</li> <li>• Creating a new process for collaborative problem solving in a cooperative and friendly climate versus as adversaries.</li> </ul>
<p><b>Develop COMET Tools</b></p>	<ul style="list-style-type: none"> <li>• COMET manual and template developed for project partners. Some partners using the COMET tool for implementation.</li> <li>• The COMET template includes information on regulatory requirements, operating standards and permit requirements, including: opacity limits, HAPs limits, criteria pollutants, fugitive dust, storm water permit requirements, universal waste requirements, etc.; pollution prevention indicators such as fuel use, fuel efficiency, production efficiency, recycled asphalt pavement (RAP) use, etc.; non-traditional emission source such as hydrocarbon gases from storage silos, truck load-outs, etc.; and environmental performance indicators which will be an effort to convert information from the above indicator types into actual emission/release/effect information.</li> </ul>
<p><b>Analysis of traditional versus focused inspections</b> - compare baseline compliance rates and environmental performance with both COMPASS efforts (intense compliance assistance and P2 assistance) and COMET efforts</p>	<ul style="list-style-type: none"> <li>• An analysis of traditional inspections versus the focused inspections used during the COMPASS revealed considerable differences in the type and amount of inspection data obtained from the two approaches.</li> <li>• Greater value provided to the asphalt sector through the focused approach in terms of improved understanding of regulatory requirements and compliance.</li> <li>• Approach increased the awareness and implementation of pollution prevention activities.</li> </ul>
<p><b>Linking Measured Changes in Indicators to Environmental Outcomes</b> - develop a methodology to determine environmental outcomes achieved through measured changes in compliance indicators, pollution prevention indicators, and non-traditional emission sources.</p>	<ul style="list-style-type: none"> <li>• This will happen later in the project.</li> </ul>

## V. Other

On July 1, 2003 CDPHE received correspondence from Art Horowitz via e-mail that the grant has been extended until June 30, 2004. On receipt of the official grant paperwork, it was evident that the grant was extended to April 30, 2004 and not through June 30, 2004 as anticipated. Given the remaining work under the contract, the April 2004 date will need to be extended as that date nears. At this time, Colorado will move forward with the April 2004 contract deadline.

The Colorado Asphalt Pavement Association (CAPA) is providing strong support to the project partners. The CAPA/CDPHE workgroup did not meet in the fourth quarter of 2003 due to the holidays and CDPHE technical assistance that was taking place during this period of time. The workgroup will meet on January 22, 2004 to check on the progress of the partners and to determine areas of need (technical assistance, external assessments, etc.).

CDPHE spent time during the fourth quarter in assessing where each project partner was in the development/implementation process, providing assistance and scheduling site visits. See accompanying spreadsheet for a summary of project status by project partner.

*On January 22, 2004 the CAPA/CDPHE workgroup met with the project partners to discuss the status of COMET development and implementation. Given the seasonal nature of the asphalt sector, companies were focusing on COMET development in preparation to the 2004 operational season. Efforts during the first quarter of 2004 included providing COMET-related training, tailoring the COMET tools for their companies, conducting aspect and impact analyses, developing procedures and compliance checklists, reviewing permits and for one company, undergoing ISO 14001 audits for final certification (four hot mix asphalt plants were certified in September 2003 and two more in February 2004. Two more plants scheduled for final audits in August 2004). CDPHE also provided compliance assistance (permit/regulatory reviews) for two asphalt facilities during this time period.*

*CDPHE submitted a no-cost grant extension request to EPA in a letter dated January 29, 2004. This request, if approved, will move the project end date from EPA's April 30, 2004 date to December 31, 2004. The extension will provide project partners with additional time to implement COMET and for CDPHE to assess the success of the COMET approach over a short period of operation (approximately six months).*

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